

ABSTRACT

The present invention relates to an apparatus and method for stabilizing a bias voltage for a pulse generating
5 modulator, which can automatically detect an optimal bias voltage for an external modulator, which is used in RZ or CSRZ modulation of an optical transmission signal using NRZ data to generate a reference pulse optical signal, and maintain the optimal bias voltage. In the bias voltage stabilizing method
10 of the present invention, an output signal of the external modulator, to which the bias voltage to be stabilized is applied, is detected, a drive clock signal applied to the external modulator is detected, a mean output value of the products obtained by the multiplication of the output signal
15 and the clock signal is periodically examined, and the bias voltage is adjusted so that the mean output value becomes "0".